



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,889	02/04/2004	Dean J. Richtsmeier	200313857-1	5369

22879 7590 09/22/2006

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

KAPLAN, HAL IRA

ART UNIT	PAPER NUMBER
----------	--------------

2836

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/772,889

Applicant(s)

RICHTSMEIER ET AL.

Examiner

Hal I. Kaplan

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/4/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: Paragraph 20, line 5 contains the phrase "the second time". It appears this should be "a third time", as the switch has already been actuated a first time in response to the first input and a second time in response to the second input. Paragraph 24, line 8 contains the phrase "this indicia". It appears this should be "these indicia". Paragraph 24, line 9 contains the word "depressment". It appears this should be "depression". Paragraph 28, lines 5-6 contain the phrase "in other ... may be omitted". This is redundant with the immediately preceding phrase "in alternative ... may be omitted". Paragraph 29, line 6 contains the phrase "actuation surface 348". It appears this should be "contact surface 348". Paragraph 30, line 1 contains the phrase "face 32". It appears this should be "face 32 and". Paragraph 33, line 1 contains the phrase "figures 6-15". It appears this should be "figures 6-14". Paragraph 36, line 11 contains the phrase "greater number of". It appears this should be "greater". Paragraph 37, line 4 contains the word "depressment". It appears this should be "depression". Paragraph 37, line 13 contains the phrase "additionally a spring". It appears this should be "additionally have a spring".

Paragraph 37, lines 3-5 state that Figure 14 illustrates a switch (26) being actuated upon depressment of a push button (548). This is inconsistent with paragraph 35, lines 5-7 which state that Figure 14 illustrates a different push button (550). Paragraph 35, lines 5-7 appear to be correct as neither of the reference numerals 26 or 548 appear in Figure 14.

Appropriate correction is required.

2. The specification is objected to under 37 CFR 1.71(a) because it is not sufficiently enabling.

Paragraph 31, lines 12-15 state that “service station 428 comprises a ... printer station including devices configured to perform servicing operations ... such service operations include wiping and capping”. One of ordinary skill in the art could not make and/or use the device because one of ordinary skill would not know what a printer service station is, and the specification does not clearly define a printer service station.

3. The specification is objected to under 37 CFR 1.73 because it does not contain a brief summary of the invention.

Drawings

4. The drawings are objected to because of the following informalities: In Figure 4, reference numeral 362 points to the wrong part. It should point to the same part as 360, but on the opposite side (the part labeled 32) (see paragraph 30, lines 14-16). Figure 5 is incomplete. Neither the carriage, pens, nor arrows are shown (see paragraph 31, lines 5-6 and 10-12).

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 423, 424, 426, 428, 434, and 436 in Figure 5 (see paragraph 31, lines 5-6 and 10-12).

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the

Art Unit: 2836

description: 582 in Figures 9 and 11. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

7. Claims 19, 21, 24, 32, and 35 are objected to because of the following informalities: Claim 19, line 2 contains the phrase "device;". It appears this should be "device; and". Claim 21, line 2 contains the phrase "the second time". It appears this should be "a third time", as the second time is in response to the second input. Claim 24, line 2 contains the phrase "the second time". It appears this should be "a third time". Claim 32, line 2 contains the word "imaging". It appears this should be "image". Claim 35, line 2 contains the word "plan". It appears this should be "plane". Appropriate correction is required.

Double Patenting

8. Applicant is advised that should claims 1, 20, and 21 be found allowable, claims 22, 23, and 24, respectively, will be objected to under 37 CFR 1.75 as being substantial duplicates thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 21 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 21 and 24 recite the limitation "the switch actuation mechanism is configured to also actuate the switch the second time in response to a third input". Claims 21 and 24 depend from claims 1 and 22, respectively. Claims 1 and 22 state that the switch is actuated the second time in response to a second input. If the switch is actuated the second time in response to the second input, then the next time the switch is actuated (in response to the third input) will be the third time, not the second

time. One of ordinary skill in the art could not use the device in the claimed manner because the second actuation cannot occur at two different times in the same sequence of actuations. For purposes of this Office Action, the Examiner has assumed that the switch is actuated a third time in response to a third input.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 1-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Regarding claims 1, 22, and 25, the phrase "the second input has at least one characteristic ... distinct from the first input" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "at least one characteristic"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). The specification does not disclose or define what is meant by a "characteristic", and it is unclear to the Examiner (see paragraph 21, lines 1-3). It appears that the switch actuation mechanism actuates the switch only in response to a button being pressed, so there is no other "characteristic" a second input can have on which actuation of the switch can be based. The only possible difference from the first input is the time at which it is performed. For purposes of this Office Action, the Examiner has assumed that a characteristic is defined as one or more indicia or events that happen after actuations of the switch, e.g. different LEDs turning on. Claims 2-21, 23, 24, and 26-31 inherit this deficiency.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

16. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

17. Claims 1-8, 18-28, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the US Patent of Muz et al. (5,610,379) in view of the US patent of Downing et al. (6,075,925).

As to claims 1, 22, and 25, Muz, drawn to a liquid and gas impenetrable switch, discloses a switch comprising: a substantially planar face (1); a switch (5) configured such that successive actuations of the switch actuates the device between a first state and a second state; and a switch actuation mechanism (14) configured to actuate the switch a first time in response to a first input along the face and a second time in response to a second input along the face (see column 3, lines 49-50 and 54-55; column 4, lines 25-39; and Figure 2). Muz does not disclose the second input having at least one characteristic, other than time at which it is performed, distinct from the first input. Downing, drawn to a control panel for image forming device, discloses a switch in which a second input has at least one characteristic (print buffers clearing), other than time at which it is performed, distinct from the first input (see column 5, lines 20-24). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to design the switching device so that the second input has at least one characteristic, other than time at which it is performed, distinct from the first input, because the additional characteristic can indicate to the user that the switch has been toggled and the electronic device is working properly.

As to claims 2 and 3, in the device of Downing, a function (printing upon a print medium) is performed when the device is in the first state and discontinued when the device is in the second state (see column 3, lines 32-36 and column 5, lines 20-24).

As to claims 4 and 5, the switch actuation mechanism of Muz includes a first movable surface (4) and a second movable surface (4) and wherein the first input

includes moving the first movable surface (4) and the second input includes moving the second movable surface (4) (see column 4, lines 25-49).

As to claims 6, 7, 26, and 27, the first and second movable surfaces (4) or Muz are depressible (see column 4, lines 25-26).

As to claim 8, the first surface (4) and the second surface (4) of Muz are spaced from one another along the face (1) (see Figure 2).

As to claims 18, 28, and 30, the actuation mechanism of Muz includes an actuation member (14) pivotally supported along the face (1), wherein the first input includes pivoting the actuation member (14) in a first direction and wherein the second input includes pivoting the actuation member (14) in a second direction (see column 4, lines 25-39).

As to claim 19, neither Downing nor Muz specifically disclose an imaging material dispensing device. However, Downing discloses a laser printer (100), and it is inherent that a laser printer comprises an imaging material dispensing device (toner cartridge). Downing also discloses a controller (20) coupled to a switch (15), wherein the dispensing device dispenses imaging material and discontinues dispensing imaging material in response to the control signals (see column 5, lines 42-45).

As to claims 20, 23, and 31, the first input and the second input of Muz are parallel to one another (see Figure 2).

As to claims 21 and 24, the switch actuation mechanism of Muz is configured to also actuate the switch a third time in response to a third input identical to the first input, other than the time at which it is performed (see column 4, lines 25-29).

Art Unit: 2836

18. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muz in view of Downing, and further in view of the US patent of Parks et al. (5,877,746).

As to claims 9-13, Muz in view of Downing disclose all of the claimed features, as set forth above, except for the first movable surface and the second movable surface having distinct indicia. Parks, drawn to a user interface for all-in-one integrated office system, discloses two buttons (22,23) with distinct indicia (Start,Stop), wherein the Start button is green and the Stop button is red (see column 13, lines 6-18). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use green and red start and stop buttons on the device of Muz in view of Downing, so that a novice user can determine which button to press to perform a given function and be able to stop the device in an emergency. In addition, the selection of green and red as the colors is a design decision based upon the device's intended use and not a patentable distinction. See MPEP §2144.04.

19. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muz in view of Downing, and further in view of the US patent of Heydner et al. (5,558,211).

As to claim 14, Muz in view of Downing disclose all of the claimed features, as set forth above, except for an extension coupled to the first button and the second button. Heydner, drawn to a push-button actuated safety switch, discloses an extension (26) coupled to first and second buttons (9,109) and movable relative to the switch (see column 7, lines 16-35 and Figure 3). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the switching technique of Heydner in the

device of Muz in view of Downing, in order to reduce the number of parts necessary to construct the switch.

As to claim 15, Heydner discloses a guide guiding movement of the extension (26) relative to the switch (see column 6, lines 44-46).

As to claim 16, the extension (26) of Heydner is movable relative to the first button (9) (see column 7, lines 32-34).

20. Claims 17 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muz in view of Downing, and further in view of the US patent of Feaster (4,191,867).

As to claims 17 and 29, Muz in view of Downing disclose all of the claimed features, as set forth above, except for the first and second inputs including sliding the actuation member in different directions. Feaster, drawn to miniature switches, discloses a switch actuation member (209), wherein the first input includes sliding the actuation member (209) in a first direction and the second input includes sliding the actuation member (209) in a second direction (see column 5, lines 10-15 and Figure 11). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the switch actuation technique of Feaster in the device of Muz in view of Downing, because it would be easier for someone with an injured hand to toggle the switch.

21. Claims 32-34, 36, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muz in view of Downing, and further in view of the US patent of Mori et al. (6,337,961).

As to claims 32-34, 36, and 38, Muz in view of Downing disclose all of the claimed features, as set forth above, except for an image forming engine. Mori, drawn to a print control method and apparatus, and printer, discloses an image forming engine (17) actuatable between an active state in which the engine (17) forms an image upon a medium and an inactive state (see column 4, lines 49-56). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the switch of Muz in view of Downing in a printer with an image forming engine, because it would be easier for the user to determine that the switch has been toggled and the device is working properly.

22. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muz in view of Downing, Feaster, and Mori.

As to claim 35, Muz in view of Downing, Feaster, and Mori disclose all of the claimed features, as set forth above. Feaster discloses a first movable input surface (212) and a second movable input surface (212 on the other side of projection 210) which slide along a substantially common plane to successively actuate the switch (see column 5, lines 10-15 and Figure 11).

23. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muz in view of Downing, Heydner, and Mori.

As to claim 37, Muz in view of Downing, Heydner, and Mori disclose all of the claimed features, as set forth above. The movable input surfaces (9,109) of Heydner are rigidly coupled to one another via hinge shafts (27,127) and the extension (26) (see column 7, lines 33-35 and Figure 3).

24. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muz in view of Downing, Parks, and Mori.

As to claim 39, Muz in view of Downing, Parks, and Mori disclose all of the claimed features, as set forth above.

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patents to Boxer (4,760,227), Nakade et al. (4,821,070, and Weisfeld (4,890,401), and the Japanese patent of Izuyama et al. (59-050381) disclose devices with similar features.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal I. Kaplan whose telephone number is 571-272-8587. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2836

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

hik



BRIAN SIRCUS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800